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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,430	09/11/2003	Kenichi Takada	0666.1740001	4090

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EXAMINER

LOPEZ, FRANK D

ART UNIT PAPER NUMBER

3745

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/659,430	<b>Applicant(s)</b> TAKADA ET AL.	
	<b>Examiner</b> F. Daniel Lopez	<b>Art Unit</b> 3745	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 24-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/862450.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/11/03</u> . | 6) <input type="checkbox"/> Other: ____  |

***Claim Rejections - 35 USC § 112***

Claims 27-30 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 27 and claim 29 line 1-2 "at least one (both) of said hydraulic piston and said control valve is made integrally with said housing" is wrong, since neither the piston nor the control valve is integral with the housing. The control valve has the housing integral with the center section and the piston slides in a cylinder integral with the center section, not the housing.

In Claims 28 and 30 line 1-3 "said hydraulic piston or said control valve, which is made integral with said housing, is disposed in said housing" make no sense, since something can not be in (i.e. inside) something else it is integral with. See also the problem discussed above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 24-30, inasmuch as they are definite, are rejected under 35 U.S.C. § 103 as being unpatentable over Jonkers et al in view of Froebe. Jonkers et al discloses an axle driving apparatus comprising a variable displacement hydraulic pump (1), hydraulic motor (2) and an axle (driving wheels 204, 205, e.g. fig 18) disposed in a housing, serving as a fluid sump (122); wherein the motor drives the axle; a center section (27) having a closed fluid circuit (including 63, 64) through which the pump and motor are mutually connected; and a hydraulic actuator, including a hydraulic piston (93) combined with a manually operable control valve (including

Art Unit: 3745

91), for tilt-operating a movable swash plate (11) of the pump; but does not disclose that the center section is in the housing; or that there is a charge pump in the housing driven together with the variable displacement pump, to supply fluid from the sump to the actuator.

Froebe teaches, for an apparatus comprising a variable displacement hydraulic pump (12) and hydraulic motor (13) disposed in a housing, serving as a fluid sump; a center section (28) having a closed fluid circuit through which the pump and motor are mutually connected; and a hydraulic actuator (shown in fig 3) for tilt-operating a movable swash plate (41) of the pump; that the center section is in the housing.

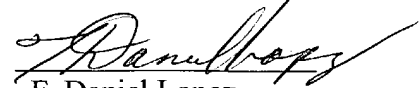
Since the location of the center section of Jonkers et al and Froebe is functionally equivalent in the hydrostatic transmission art, it would have been obvious at the time the invention was made to one having ordinary skill in the art to locate the center section of Jonkers et al in the housing, as taught by Froebe, as a matter of engineering expediency.

Official notice is taken that it is well known to use a charge pump in a housing of a hydrostatic transmission, driven together with a variable displacement pump, to supply fluid from a sump to an actuator adjusting the displacement of the variable pump. It would have been obvious at the time the invention was made to one having ordinary skill in the art to include a charge pump in the housing of Jonkers et al, driven together with the variable displacement pump, to supply fluid from the sump to the actuator, as a matter of engineering expediency.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is (703) 872-9306. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

  
F. Daniel Lopez  
Primary Examiner  
Art Unit 3745  
December 10, 2004